

75th Air Base Wing



Effective Compliance & Recordkeeping Strategies for Refrigerant Containing Assets

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Outline



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- 1. Objective**
- 2. Hill AFB ODS Background**
- 3. Improving ODS Procedures**
- 4. Lessons Learned—Risk Reduction**
- 5. Summary**



Objective

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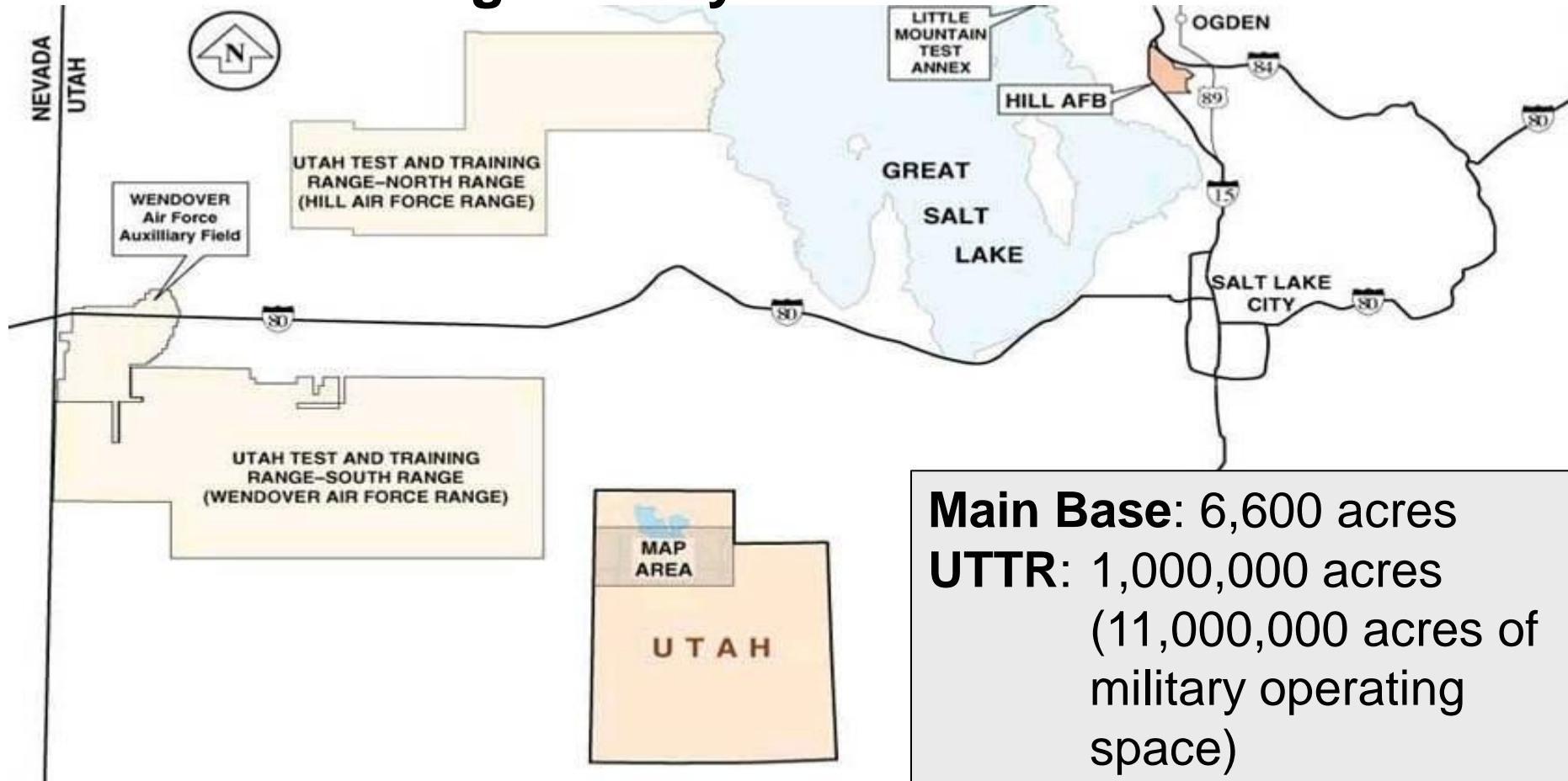
- **Improve compliance monitoring, record keeping, and reporting of Ozone Depleting Substances (ODS) at Hill AFB by:**
 - **Implementing more thorough refrigerant data management techniques**
 - **Reducing the risk of non-compliance involving recordkeeping for ODS**



Hill AFB ODS Background

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■ Hill AFB—a large facility:

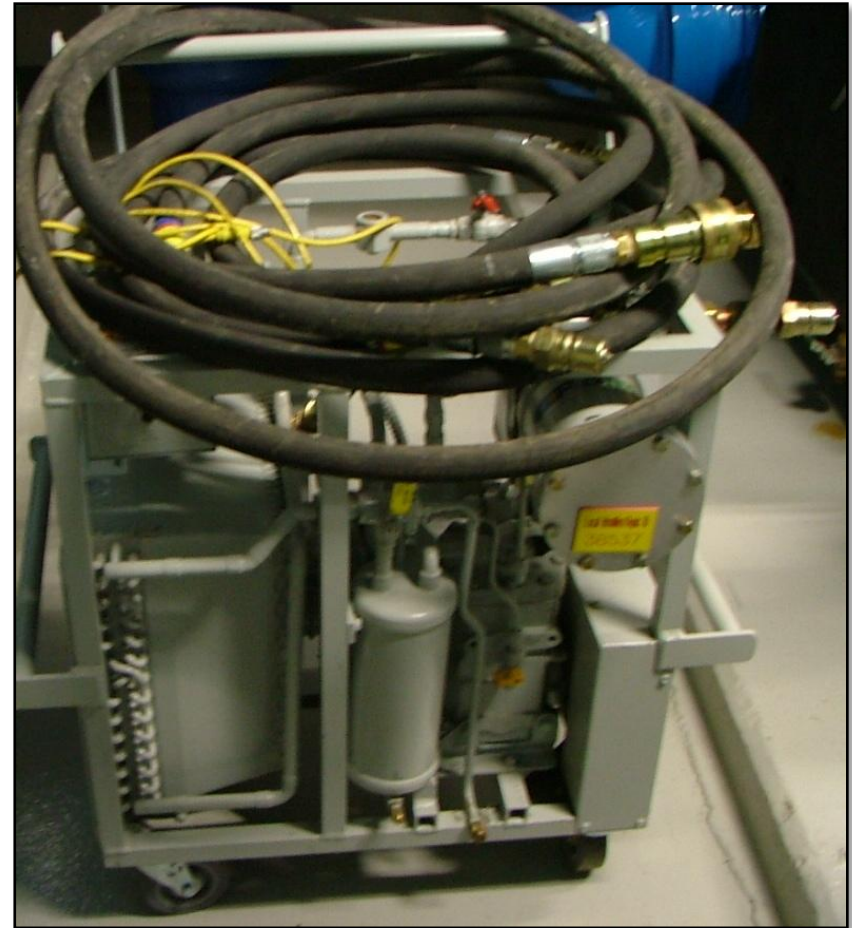




Hill AFB ODS Background

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- 16 refrigerant recycling processes
- Nearly 200 appliances 50 lbs or greater subject to 40 CFR 82
- Largest units:
 - Two 1,200 lb units supporting mission-critical applications at the Defense Information Systems Agency



Hill AFB-owned refrigerant recycling unit



Hill AFB ODS Background



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■ ODS Regulatory Drivers:

■ Montreal Protocol of 1987:

- Intent to cease production of ODS
- Incorporated into Clean Air Act (CAA)

■ Title VI of the CAA 1990 amendments, “Stratospheric Ozone Protection”:

- Encourages using safer chemicals
- Requirements incorporated into 40 CFR 82



Hill AFB ODS Background

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- **ODS Regulatory Drivers, cont'd:**
 - **Code of Federal Regulations (CFR) Title 40, Part 82, “Refrigerant Recycling and Emissions Reduction”:**
 - Addresses the handling, recycling and disposal of ODS-containing appliances
 - **Hill AFB Title V Air Quality Operating Permit:**
 - Requires Hill AFB to adhere to 40 CFR 82 requirements



Hill AFB ODS Background

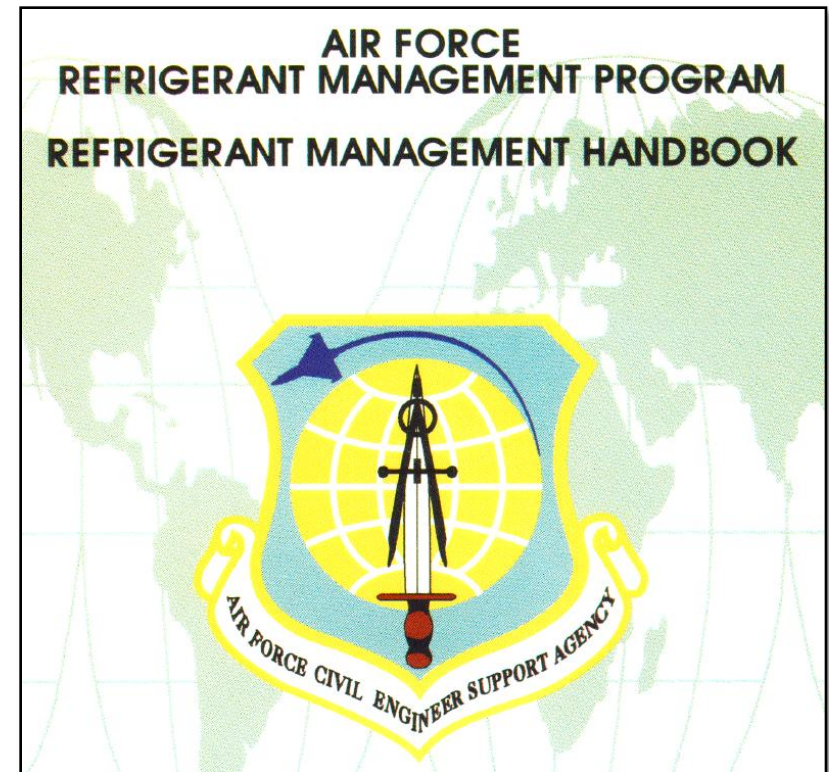


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- ODS Compliance Drivers, cont'd:

- AFD-070613-041, *Air Force Refrigerant Management Handbook* does NOT address:

- Recent Green House Gas (GHG) inventory regulations
- EPA's Significant New Alternatives Policy (SNAP) covering phase-out and alternative products



AFD-070613-041



Hill AFB ODS Background



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- **Nation-wide increased focus on ODS compliance during EPA multi-media inspections**
- **Common ODS violations:**
 - **Inadequate recordkeeping associated with equipment/technician certifications**
 - **Inadequate recordkeeping involving servicing details, leak checks, and leak rates**
- **Air Force Material Command initiated Notice to Airmen (NOTAM):**
 - **Prompted facilities to proactively gather data to illustrate ODS compliance in case of inspection**



Improving ODS Procedures

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- **Partially in response to the NOTAM, Hill AFB data collection and management efforts include:**
 - **Inventorying certain equipment subject to Title VI requirements**
 - **Creating a refrigerant leak rate calculation algorithm, and archiving refrigeration technician certification documents in the AF-approved air quality data management system**
- **Data collection methods:**
 - **Using existing appliance information**
 - **Conducting inspections and research**



Improving ODS Procedures

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- Hill AFB improvements to the existing air quality data management system include:
 - Better identification of ODS recovery/recycling equipment
 - Increased inspection frequency for refrigerant equipment from annually to semi-annually
 - Improved checklists for ODS source inspections
 - Identification of refrigerant-containing equipment maintenance contractors to ensure compliance with 40 CFR 82
 - Identification of construction projects with new equipment subject to 40 CFR 82





Improving ODS Procedures



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- The improved system will house:
 - Equipment model numbers and serial numbers
 - Charge capacities
 - Service dates
 - Net refrigerant loss
 - Annualized leak rates
 - Amounts of refrigerant recovered and added
 - Types of refrigerants used
 - Technicians' names

Create ODC Usage Record



Equipment: *  



Model #:

Serial #:

Capacity:

Last Service Date:


Technician: *  

Refrigerant: *  

Recovered: *
(in lbs)

Added: *
(in lbs)

Net Loss:
(in lbs)

Service Date: * 
yyyy/mm/dd

Repair Description:

Validate Net Loss? ☐ Yes ☐ No

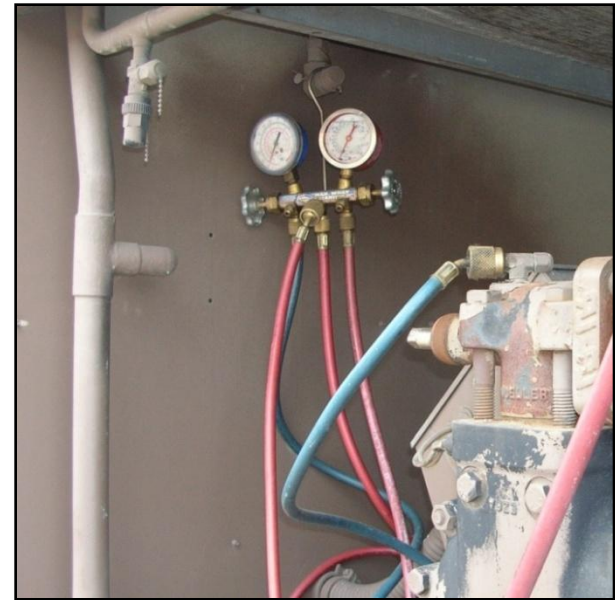


Improving ODS Procedures



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- The improvements will support:
 - Leak rate recordkeeping and reporting
 - 5-year records archive:
 - Technician credentials
 - Equipment certifications
 - Equipment maintenance logs
 - Repair reports



Air Conditioning Repair in Progress



Lessons Learned--Risk Reduction



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■ ODS compliance risks:

- Maintenance and repair contractors
- Leak rate calculation and reporting
- New/Modified appliances
- Missing technician certification records

■ By improving ODS recordkeeping, the AF-approved air quality data management system will reduce risk



Convenience Store Cooler



Summary

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- EPA is cracking down on ODS non-compliance
- There are many compliance risks associated with ODS
- To improve ODS data management, Hill AFB is improving their air data management system
- Hill AFB is currently inventorying ODS equipment
- The AF-approved air quality data management system will improve recordkeeping and ease reporting for ODS



Questions?



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